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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/719,404	11/20/2003	Steven Edward Klein	TUC920030147US1	3360	
46917 KONRAD RA	7590 12/31/200 YNES & VICTOR, LL		EXAMINER		
ATTN: IBM37	,	· .	WALSH, JOHN B		
	EVERLY DRIVE, SUI LLS, CA 90212	1 E 2 10	ART UNIT	PAPER NUMBER	
			2151		
			MAIL DATE	DELIVERY MODE	
		•	12/31/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)	
	10/719,404	KLEIN ET AL.	
Office Action Summary	Examiner	Art Unit	
	John B. Walsh	2151	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on	<u>_</u> .		
2a) This action is FINAL . 2b) ☐ This	action is non-final.		
3) Since this application is in condition for alloward	nce except for formal matters, pr	osecution as to the merits is	
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) <u>1-36</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-36</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.		
Application Papers			
9)☐ The specification is objected to by the Examine	er.		٠
10) The drawing(s) filed on is/are: a) acc	epted or b)□ objected to by the	Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	• • • • • • • • • • • • • • • • • • • •	•	
11) The oath or declaration is objected to by the Ex	caminer. Note the attached Office	e Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	tion No red in this National Stage	
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 11/20/03.	4) Interview Summan Paper No(s)/Mail D 5) Notice of Informal C 6) Other:	Date	

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DETAILED ACTION

Specification

1. The use of the trademark Enterprise Storage Server (ESS) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 25-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are drawn to an article of manufacture. On page 16, lines 10-13 disclose the article of manufacture as transmission media (i.e. signal). Signals are non-statutory subject matter.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1-8, 10, 12-20, 22, 24 and 25-32, 34 and 36 as best understood are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,609,165 to Frazier.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As concerns claims 1, 13 and 25, determining, by a first device (figure 1; col. 2, lines 37-38), a possibility of an invalidation of a second device (figure 1; col. 2, lines 37-38), wherein the first device is coupled to the second device via a fabric (figure 1; column 2, line 40; column 2, lines 35-55); sending a query (col. 5, line 34; col. 41, lines 22-31) from the first device to validate the second device, in response to determining the possibility of the invalidation of the second device (col. 5, e), f) and g); and determining, at the first device, whether to continue I/O operations from the first device to the second device based on receiving a response (col. 41, lines 32-35) to the query within a time period (column 47, lines 65-67).

As concerns claims 2, 14 and 26, wherein determining, by the first device, the possibility of the invalidation of the second device, further comprises: determining whether the first device has received either a notification of a state change (col. 47, lines 50-51) from the fabric or has timed out (column 47, lines 26-27, 65-67) while waiting for a completion of an I/O operation sent from the first device to the second device.

As concerns claims 3, 15 and 27, wherein sending the query further comprises: sending a service frame from the first device to the second device, wherein the service frame (column 48,

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line 63-column 49, line 12; col. 41, lines 22-31) is capable of determining a presence of the second device without disrupting the I/O operations.

As concerns claims 4, 16 and 28, wherein the service frame is a PDISC Extended Link Service frame (column 48, line 63-column 49, line 12).

As concerns claims 5, 17 and 29, further comprising: continuing the I/O operations, if the response to the query within the time period is a frame that validates the World Wide Node Name and the World Wide Port name associated with a connection to the second device (col. 47, lines 62-col. 48, line 20).

As concerns claims 6, 18 and 30, wherein the frame is an LS_ACC frame (col. 62, line 12).

As concerns claims 7, 19 and 31, further comprising: terminating a connection from the first device to the second device, if the response to the query is not received within the time period (col. 47, lines 26-27) or if the response is a frame that indicates that the second device does not consider the first device to be logged in to the second device (col. 27, lines 41-46).

As concerns claims 8, 20 and 32, wherein the frame is a LOGO frame (col. 63, lines 13-16) or a LS RJT frame.

As concerns claims 10, 22 and 34, further comprising: receiving the query at the second device, prior to determining, at the first device, whether to continue I/O operations from the first device to the second device; determining, at the second device, whether the first device is considered to be logged in to the second device; and sending the response from the second device, wherein the response indicates that the second device considers the first device to be logged in to the second device, in response to determining that the first device is considered to be logged in to the second device (col. 30, lines 60-64-requires acceptance; col. 47, line 53).

As concerns claims 12, 24 and 36, wherein the first and second devices are fibre channel adapters (col. 63, lines 25 and 35; col. 3, lines 20-24) coupled to primary and secondary storage controllers (col. 3, lines 10-11) respectively, wherein the fabric is a switched fabric (column 47, line 46), and wherein the fibre channel adapters communicate using extended link services commands (column 48, line 63-column 49, line 12).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 9, 11, 21, 23 and 33 and 35 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,609,165 to Frazier as applied above in view of "Fibre Channel Framing and Signaling" (herein referred as FC-FS).

Frazier '165 does not explicitly disclose the indication of the second device does not consider the first device to be logged in.

FC-FS teach indication of a device not being logged in (p. 160-12.3.2.7.4, 12.3.2.8-8.1; p. 267-12.3.3.4-4.1).

It would have been obvious to one having ordinary skill in the art at the time of the invention to provide the system of Frazier '165 with an indication of a devices logged status, as taught by FC-FS, in order to provide a means of controlling the flow of data.

Such a modification is merely a combination of known elements yielding predicatable results.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John B. Walsh Primary Examiner Art Unit 2151